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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,637	07/23/2003	Kurt M. Schroeder	85677D-W	8069

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EXAMINER

HYUN, PAUL SANG HWA

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,637

Applicant(s)

SCHROEDER ET AL.

Examiner

Paul S. Hyun

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

REMARKS

Claims 1-40 are currently pending. Amendments to claims 24, 27-32 and 37 have been acknowledged. The amendments to the Specification have also been acknowledged.

Election/Restrictions

Applicants' arguments regarding the restriction requirement imposed on November 1, 2005 by the Office have been considered, but the arguments are not persuasive.

In regards to the arguments directed toward the restriction of Groups II and III, the Office agrees with Applicants that there exists a commonality between the two Groups, which is the particle of claim 24. However, as indicated in the previous Office Action, the two groups are related as subcombinations and each subcombination is separately usable on its own. Moreover, examination of both groups would be burdensome because it is not inherent that the complete search of the particle of Group II will encompass the complete search of the element of Group III comprising a support and a receiving layer. Therefore, the restriction is maintained.

In regards to the arguments directed toward the restriction of Groups I and II, there exists a commonality between the two Groups, which is the particle of claim 24. However, as indicated in the previous Office Action, the two groups are related as a product and the method of making the product and the polymeric particle of Group II do not have to be prepared by the method of Group I. Specifically, the loaded polymeric

Art Unit: 1743

particles can be prepared in a single composition. The claim language of step (b) suggests that there is no formation of polymeric particles occurring in the step. Therefore, the polymeric particles can simply be added into the composition prepared in step (a) of the method instead of preparing a separate aqueous composition comprising the polymeric particles. In addition, examination of both groups would be burdensome because it is not inherent that the complete search of the particle of Group II will encompass the complete search of the method steps of Group I. Therefore, the restriction is maintained.

Response to Amendment

Amendments to the Specification in the form of incorporating the serial numbers of the co-pending application to which this instant application refers has been acknowledged.

Amendments to claims 27-32 have been acknowledged. Consequently, the objections to the claims cited in the previous Office Action are withdrawn.

Amendment to claim 37 has been acknowledged. Consequently, the rejection of claim 37 under 35 U.S.C. 112 1st paragraph cited in the previous Office Action has been withdrawn.

Claim Objections

Claim 24 is objected to because of the following informalities:

Art Unit: 1743

The limitation "loaded" recited in line 5 of the claim should be deleted. The recitation suggests that the particle is already loaded before it is loaded with the photographic coupler and the high boiling solvent.

Claim 31 is objected to because of the following informalities:

The limitation "surfaces" recited in line 2 and "particles" recited in line 3 should be in the singular forms.

Claim 32 is objected to because of the following informalities:

The limitation "surfaces" recited in line 3 should be in the singular form.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rembaum et al. (US 4,929,400) in view of Mihara et al. (US 4,331,444) and de Jaeger et al. (US 4,837,168).

Rembaum et al. disclose polymeric microspheres adapted to be used for immunoassays and a method for producing them. The reference discloses that the microspheres are acrylic (see Abstract) and can range from 1000 Angstroms to 100 microns in size (see line 14, col. 6). Each microsphere comprises functional groups (i.e.

Art Unit: 1743

aldehyde) capable of binding proteins (see line 65, col. 7) and a dye for visually detecting the microspheres (see lines 26-30, col. 7). However, the reference does not disclose that the dye comprises a photographic coupler.

De Jaeger et al. disclose latex label adapted to be used for immunoassays. The latex particles are coupled to dye-forming couplers that can be developed to form cyan, magenta or yellow dyes. The dyes are used to visually detect the occurrence of a reaction of interest. The reference discloses that phenol or a naphthol type compounds produce cyan dyes, pyrazolone type compounds form magenta dyes and open chain ketomethylene type compounds form yellow dyes

Mihara et al. disclose a method for immunoassay using a phenol or a naphthol coupler, a pyrazolone coupler, and an open chain ketomethylene coupler that are developed by oxidizing developing agents to form cyan, magenta or yellow dyes, respectively (see line 55 col. 8 – line 43 col. 9). The reference discloses that the couplers are dissolved in high boiling solvents (i.e. dibutyl phthalate) before the solution is applied to the target substrate or support (see lines 3-25 col. 10).

It would have been obvious to one of ordinary skill in the art to dye the microspheres disclosed by Rembaum et al. with the dye-forming couplers dissolved in high boiling solvents disclosed by Mihara et al. and de Jaeger et al. since the 3 dye colors provide versatility and diversity in detection.

Response to Arguments

Applicant's arguments filed on 2/21/06, with respect to the rejection of claims 24-30 and 32-39 under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. in view of Mihara et al. have been fully considered and are persuasive. Therefore, the rejection of claims 24-30 and 32-39 as well as the rejection of claim 31 under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. in view of Mihara et al. and Rembaum have been withdrawn. However, upon further consideration, a new ground of rejection is made.

The Office agrees with Applicants' argument that there is no teaching in the Fujiwara et al. reference to incorporate dyes into the microspheres disclosed by the reference.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul S. Hyun whose telephone number is (571)-272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PSH
5/5/06


Jill Warden
Supervisory Patent Examiner
Technology Center 1700